

In the Claims:

This listing of claims replaces all prior versions.

1. (Currently Amended) A method of determining disconnection time information which is significant for a disconnection period in which disconnection period an integrated circuit of a data carrier designed for contactless communication with a communication partner device has not been adequately supplied with power by ~~means of~~ a power supply field, wherein at least one first storage capacitor of the integrated circuit is charged while the integrated circuit is being adequately supplied, and wherein the at least one first storage capacitor is discharged from a first starting time when the integrated circuit is subsequently no longer adequately supplied, and wherein the disconnection time information is determined on the basis of the discharge behavior, which is affected by the IC material and by radiation, of the at least one first storage capacitor and wherein the determined disconnection time information is corrected in dependence on the effects of at least one of the IC material and/or on at least one radiation effect, and on the basis of the discharge behavior of the at least one first storage capacitor and on discharge behavior of a second storage capacitor of the integrated circuit.

2. (Currently Amended) A method as claimed in claim 1, ~~wherein the disconnection time information is determined and corrected on the basis of the discharge behavior of the at least one first storage capacitor and on the basis of the discharge behavior of a second storage capacitor of the integrated circuit,~~ wherein a renewed charging of the at least one first storage capacitor is prevented from a second starting time following the first starting time, from which second starting time an adequate supply is re-established, to a determination time and wherein the second storage capacitor is charged from the second starting time and wherein the second storage capacitor is discharged from a third starting time following the second starting time and wherein the discharge voltage of the at least one first storage capacitor is compared to the discharge voltage of the second storage capacitor at the determination time following the third starting time and wherein the disconnection time information is determined in dependence on a result of the

comparison.

3. (Currently Amended) A method as claimed in claim 1, ~~wherein the disconnection time information is determined and corrected on the basis of the discharge behavior of the at least one first storage capacitor~~ wherein the first storage capacitor is charged from a second starting time following the first starting time from which second starting time an adequate supply is re-established, and wherein the first storage capacitor is discharged from a third starting time following the second starting time and wherein the discharge voltage of the first storage capacitor is compared to the discharge voltage of the second storage capacitor present at the second starting time at the determination time following the third starting time and wherein the disconnection time information is determined in dependence on a result of the comparison.

4. (Previously presented) A method as claimed in claim 1, wherein the disconnection time information is used to decide whether the data carrier is to respond to certain prompt commands of the communication partner device.

5. (Currently Amended) An integrated circuit of a data carrier designed for contactless communication with a communication partner device, comprising a first charging circuit for charging at least one first storage capacitor of the integrated circuit while the integrated circuit is being adequately supplied by ~~means of~~ a power supply field, and comprising a first discharge circuit for discharging the first storage capacitor following a first starting time when the integrated circuit is no longer adequately supplied with power, wherein the discharge behavior of the at least one storage capacitor is affected by the IC material and by at least one radiation effect, and comprising determination logic circuitry for determining disconnection time information which is significant for a disconnection period in which disconnection period the integrated circuit has not been adequately supplied with power, the disconnection time information being determined on the basis of the discharge behavior of the at least one first storage capacitor which is affected by the IC material and by the at least one radiation effect, so that the disconnection time information is available from a determination time, and comprising

correction logic circuitry for the correction of the determined disconnection time information in dependence on the effects of the IC material and/or the at least one radiation effect, and on the basis of the discharge behavior of the at least one first storage capacitor and on at least one of the discharge behavior of a second storage capacitor of the integrated circuit and a temperature indication of the integrated circuit.

6. (Currently Amended) An integrated circuit as claimed in claim 5, wherein a renewed charging of the at least one first storage capacitor is prevented with the aid of the determination logic circuitry from a second starting time following the first starting time from, which second starting time an adequate supply is re-established, to a determination time ~~and wherein a second storage capacitor is provided~~, and wherein a second charging circuit is provided for charging the second storage capacitor from the second starting time and wherein a second discharge circuit is provided for discharging the second storage capacitor from a third starting time following the second starting time wherein the discharge behavior of the second storage capacitor is affected by the IC material and by the at least one radiation effect, and wherein the determination logic circuitry is designed for comparing the discharge voltage of the at least one first storage capacitor to the discharge voltage of the second storage capacitor at the determination time following the third starting time and for determining the disconnection time information in dependence on a result of the comparison.

7. (Previously presented) An integrated circuit as claimed in claim 5, wherein a renewed charging of the at least one first storage capacitor can be started with the aid of the determination logic circuitry from a second starting time following the first starting time from which second starting time an adequate supply is re-established, and wherein the first discharge circuit is provided for discharging the first storage capacitor from a third starting time following the second starting time wherein the determination logic circuitry is designed for comparing the discharge voltage of the first storage capacitor present at the second starting time to the discharge voltage of the first storage capacitor present at the determination time following the third starting time and for determining the disconnection time information in dependence on a result of the comparison.

8. (Previously presented) An integrated circuit as claimed in claim 6, wherein the capacitance of the at least one first storage capacitor corresponds to a multiple of the capacitance of the second storage capacitor.
9. (Previously presented) An integrated circuit as claimed in claim 6, wherein the at least one first storage capacitor and the second storage capacitor are arranged immediately adjacent to one another in the integrated circuit.
10. (Previously presented) A data carrier for contactless communication with a communication partner device, which data carrier is provided with an integrated circuit as claimed in claim 5.
11. (New) A circuit for determining disconnection time information for a disconnection period in which disconnection period an integrated circuit of a data carrier designed for contactless communication with a communication partner device has not been adequately supplied with power, the circuit comprising:
- at least one first storage capacitor arranged in the integrated circuit for discharging from a first starting time when the integrated circuit is subsequently no longer adequately supplied with power,
 - a first charge circuit arranged to charge the at least one first storage capacitor while the integrated circuit is being adequately supplied with power,
 - a logic circuit configured and arranged for
 - determining the disconnection time information on the basis of the discharge behavior, which is affected by the IC material and by radiation, of the at least one first storage capacitor, and
 - correcting the determined disconnection time information in dependence on the effects of at least one of the IC material and at least one radiation effect, and on the basis of the discharge behavior of the at least one first storage capacitor and on discharge behavior of a second storage capacitor of the

integrated circuit.

12. (New) The circuit of claim 11, wherein the logic circuit includes a computer configured and arranged for at least one of

determining the disconnection time information on the basis of the discharge behavior, which is affected by the IC material and by radiation, of the at least one first storage capacitor, and

correcting the determined disconnection time information in dependence on the effects of at least one of the IC material and at least one radiation effect, and on the basis of the discharge behavior of the at least one first storage capacitor and on discharge behavior of a second storage capacitor of the integrated circuit.

13. (New) The circuit of claim 11, wherein the logic circuit includes a hard-wired logic circuit configured and arranged for at least one of

determining the disconnection time information on the basis of the discharge behavior, which is affected by the IC material and by radiation, of the at least one first storage capacitor, and

correcting the determined disconnection time information in dependence on the effects of at least one of the IC material and at least one radiation effect, and on the basis of the discharge behavior of the at least one first storage capacitor and on discharge behavior of a second storage capacitor of the integrated circuit.

14. (New) The circuit of claim 11, wherein the logic circuit includes a comparator circuit configured and arranged to compare, respectively, charges of the first and second storage capacitors, and wherein an output from the comparator circuit is used for determining the disconnection time information.

15. (New) The circuit of claim 11, wherein the logic circuit includes a computer and a comparator circuit configured and arranged to compare, respectively, charges of the first

and second storage capacitors, the computer being responsive to an output from the comparator circuit for determining the disconnection time information.

16. (New) A circuit for determining disconnection time information for a disconnection period in which disconnection period an integrated circuit of a data carrier designed for contactless communication with a communication partner device has not been adequately supplied with power, the circuit comprising:

- at least one first storage capacitor arranged in the integrated circuit for discharging from a first starting time when the integrated circuit is subsequently no longer adequately supplied with power,

- a first charge circuit arranged to charge the at least one first storage capacitor while the integrated circuit is being adequately supplied with power,

- a logic circuit configured and arranged for

- determining the disconnection time information on the basis of the discharge behavior, which is affected by the IC material and by radiation, of the at least one first storage capacitor, and

- correcting the determined disconnection time information in dependence on the effects of at least one of the IC material and at least one radiation effect, and on the basis of the discharge behavior of the at least one first storage capacitor and on discharge behavior of at least one of a second storage capacitor of the integrated circuit and of a temperature indication of the integrated circuit.

17. (New) The circuit of claim 16, further including a temperature sensor 23 configured and arranged to provide a signal representing the temperature indication, and wherein the determined disconnection time information is corrected, at least in part, on the basis of a temperature indication of the integrated circuit.

18. (New) The circuit of claim 16, wherein the determined disconnection time information is corrected, at least in part, on the basis of a temperature indication of the integrated circuit.

19. (New) The circuit of claim 16, wherein the determined disconnection time information is corrected, at least in part, on the basis of a temperature indication of the integrated circuit, and wherein logic circuit is further configured and arranged for correcting the determined disconnection time information by selected stored values to account for both the discharge behavior of at least one of first and second storage capacitors and the temperature indication of the integrated circuit.